

TOWNESILITUS, A NEW GENUS FOR A SPECIES GROUP IN MICROCTONUS
(HYMENOPTERA: BRACONIDAE, EUPHORINAE)

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Abstract

Townesilitus, new genus, is described for a small group of Palearctic and Nearctic species in Microctonus Wesmael characterized by an unusually wide and weakly convex clypeus, and by the ventral margins of the petiole fused with the sternite.

Muesebeck (1936) reviewed the known Euphorine genera and defined Microctonus Wesmael by a combination of characters including nongeniculate antennae with a short scape; two cubital cells, the first confluent with the first discoidal and a complete submediellian cell; and strongly exerted ovipositor. He pointed out that Microctonus belongs to the same natural group as Perilitus Nees and he retained the division between these two genera (by "separation or confluence of the first cubital and first discoidal cells") merely for practical reasons. During a revision of the European species, the first author found other characters to divide the Perilitus-Microctonus complex into more natural subgroups. Though the revision is not advanced enough to decide if Microctonus is a valid genus or only a synonym of Perilitus, it allows the segregation of a group of species which differs from the others by morphological and ethological characters. The authors believe these characters are important enough to justify the erection of a new euphorine genus. In most species of Microctonus (as usually defined and including the genotype Perilitus aethiops Nees) the clypeus is narrow and distinctly convex and the sternite of the first abdominal segment is free from the tergite, i.e. the ventral margins of the petiole are widely separated in front of the spiracles (Figs. 4 - 6). However, in the above mentioned group, the clypeus is unusually wide and almost flat, and on the petiole the ventral margins of the tergite are completely fused with the sternite (Figs. 1 - 3). The oviposition habits of the species in this group are characteristic.

We wish to dedicate this new genus to Henry Townes in affectionate admiration for a great man and an eminent entomologist, and call it Townesilitus, to indicate also the close relationship of this group to the genus Perilitus Nees.

TOWNESILITUS, new genus
(Figs. 1-3)

Front wing 1.5 - 3.0 mm long. Clypeus very broad, at least twice as wide as long, and only very weakly convex, its apex broadly truncate. Tip of mandible not conspicuously twisted, bifid, the lower tooth much shorter (ca. 1 : 4) than the upper one. Occipital carina complete, dorsally neither weakened nor dipped. Thorax moderately stout, about 2.0 times as long and 1.5 times as high as broad (measured between the tegulae). Femora, especially femora 1 and 2, a little clubshaped (only very slightly, but more so than in most Microctonus). Sternum I fused with tergum I, reaching about as far back as the spiracles are located. Petiolus (segment I) strongly arched in side view, its dorsal face longitudinally striate and laterally carinate from base to apex without a medial convergence of carinae in front of spiracles and without dorsal pits. Terga II ff. smooth and shining and with only very few hairs. Ovipositor exerted, slightly downcurved, but when concealed in its sheaths often appearing almost straight.

Type-species: **Microctonus bicolor** Wesmael.

In this genus are included, besides the genotype from Europe: Microctonus deceptor Wesmael, M. breviradialis Tobias and several undescribed or undetermined species from the Palearctic region; Microctonus crepidoderae Loan, M. cucumeridis Loan, M. psylliodis Loan and a small number of undescribed species from the Nearctic region.

Habits: Adult chrysomelid Coleoptera are recorded as hosts in Europe (Sommer 1980) and North America (Loan 1969). The oviposition behaviour of M. bicolor, psylliodis and crepidoderae (Loan 1967) is distinctive and similar to the blacine Pygostolus falcatus (Hal.) (Loan and Holdaway 1961a): the female leaps onto the elytra of the host and, facing the thorax and parallel to the body of the host, immediately inserts the ovipositor into the apical

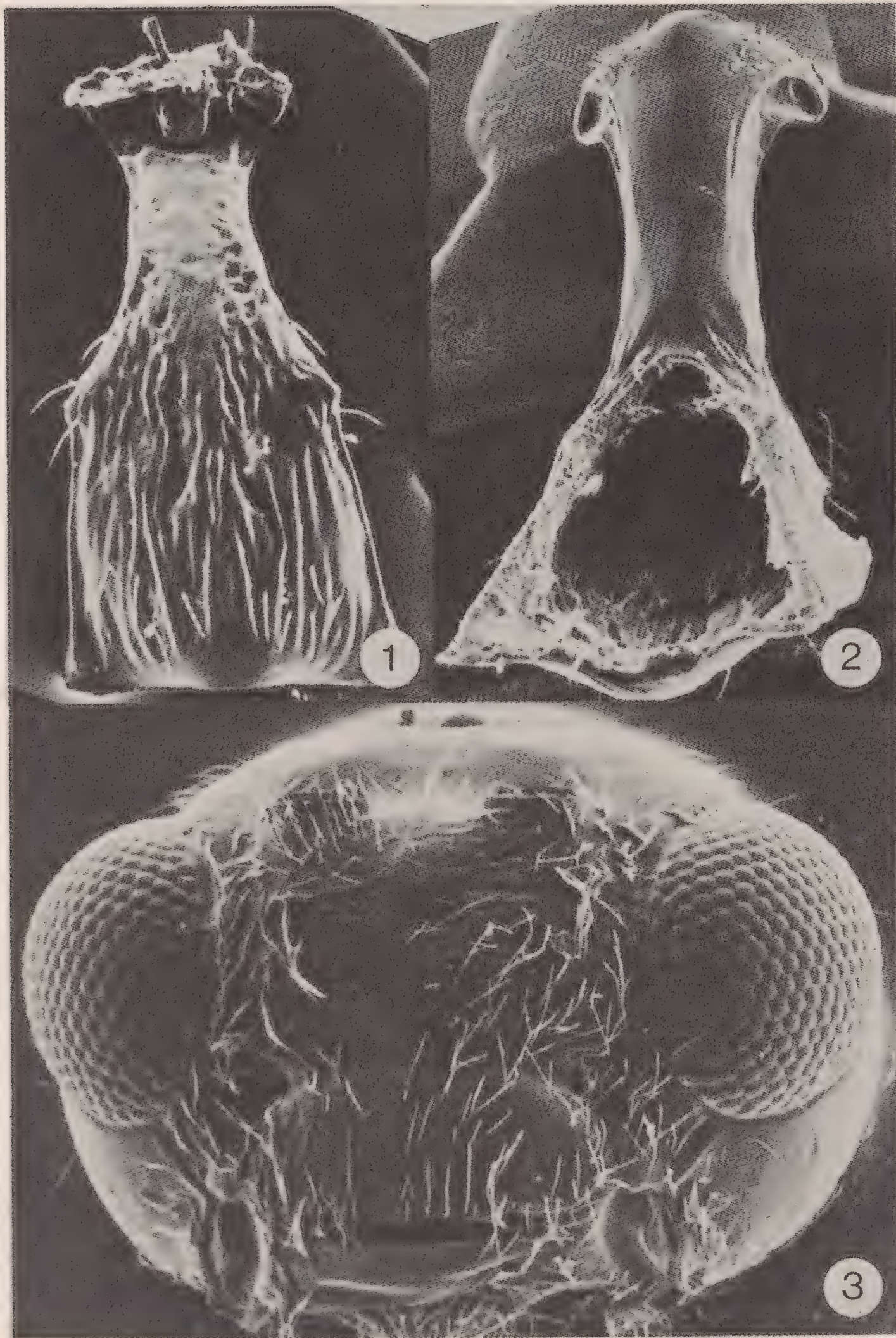
region of the haemocoel. While various oviposition positions are known for Microctonus as here restricted, e.g. the host parasitized through the base of an antenna (Freeman 1967) or more commonly at the apex of the abdomen (aethiopoides Loan (Loan and Holdaway 1961b), in all examples the parasite does not mount the host.

Acknowledgements

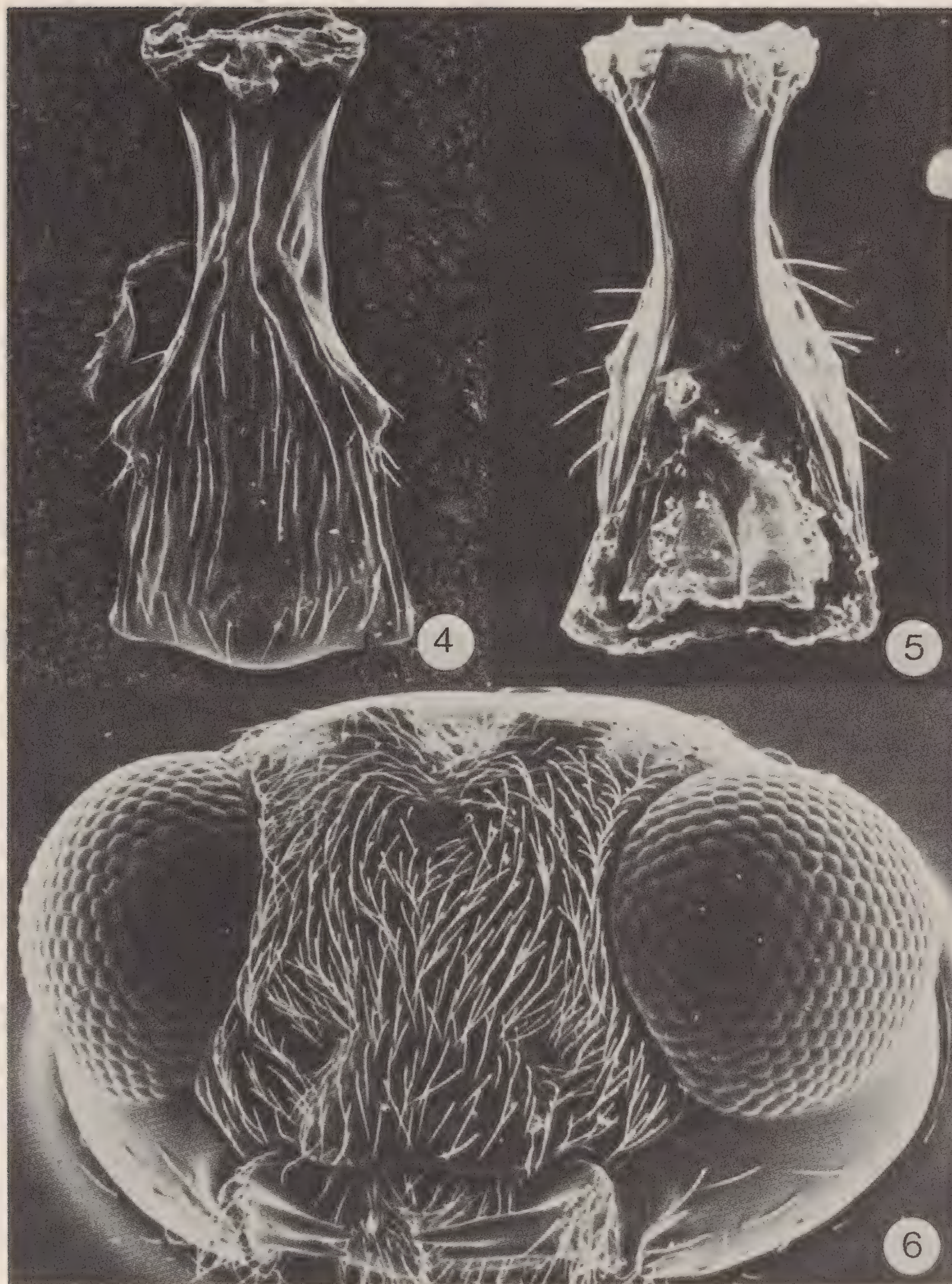
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Figs. 1-3. SEM micrographs of *Townesilitus bicolor*: 1-2, Dorsal and ventral views of tergite 1 respectively. 3, Clypeus.



Figs. 4-6. SEM micrographs of *Microctonus vittatae*: 4-5, Dorsal and ventral views of tergite 1 respectively. 6, Clypeus.